

Notice of Allowability

Application No.

10/780,884

Examiner

Naum B. Levin

Applicant(s)

GOODWIN, FRANCIS

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Application filed on 02/19/04.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 15 June 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


VUTHE SIEK
PRIMARY EXAMINER

DETAILED ACTION

This office action is in response to application 10/780,884 filed on 02/19/2004.

Claims 1-18 remain pending in the application.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

2. Claim 1:

line 14, replace ",", with – ; --;

line 16, replace ",", with – ; --;

line 22, after ":", insert – and --.

3. Claim 3:

line 2, replace "wafer," with – wafer; --.

4. Claim 4:

line 2, replace ",", with – ; --;

line 5, replace ",", with – ; --.

5. Claim 7:

line 14, replace ",", with – ; --;

line 16, replace ",", with – ; --;

line 23, after ":", insert – and --.

6. Claim 10:

line 2, replace "wafer," with – wafer; --.

7. Claim 11:

line 2, replace ",", with – ; --;

line 5, replace ",", with – ; --.

Allowable Subject Matter

8. Claims 1-18 are allowed over prior art of record.

9. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest or render obvious:

A method of determining the overlay accuracy of multiple patterns formed within an arrangement of exposure fields on a semiconductor wafer, comprising: determining a first set of correctable and/or non-correctable overlay errors from a measured first shifts of a plurality of overlay targets; selecting a number of overlay targets from said plurality of patterns and forming at least two different subsets thereof, wherein each subset comprises overlay targets residing in at least three of the exposure fields; for each of the subsets calculating a second set of correctable and/or non-correctable errors from the measured first shifts of the selected overlay targets; comparing the second set of correctable and/or non-correctable errors with the first set of correctable and/or non-correctable errors; providing the semiconductor wafer and measuring second shifts of those overlay targets, whose positions on the semiconductor wafer coincide with positions of the overlay targets of the selected subset on a test wafer.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B. Levin whose telephone number is 571-272-1898. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER